Preface

AN OVERVIEW OF THE UBIQUITOUS WORLD OF MARKETPLACE

The Internet has undoubtedly introduced a significant wave of changes. The increased electronic transmission capacity and technology is further paving a super-highway towards unrestricted communication networks. Another wave of change, heading towards a world of ubiquitous networks and universal devices, which will present a new perspective to time and space, is on its way. It is expected that the next-generation commerce will emerge from traditional commerce, e-commerce, m-commerce (mobile commerce), and eventually to ubiquitous commerce. This gives an excellent opportunity to empirically examine the issue of the marketplace of u-commerce as the focus of our book.

U-commerce (ubiquitous commerce) is the use of ubiquitous networks, including Internet, mobile phone and digital TV, to support personalized and uninterrupted communications and transactions between various types of users. It is a fusion of e-commerce, m-commerce (mobile commerce), and traditional over-the-counter retail business. U-commerce is a dynamic convergence of the physical and the digital, the interface of brick-and-mortar commerce with Web-based wireless and other next-generation technologies in ways that will create new levels of convenience and value for buyers and sellers, and it is considered to be substantially more advanced than PC-based e-commerce. In short, u-commerce is the creation of a marketplace that reaches individuals where they are, using the devices that they want to use, with the networks doing the work without the user needing to modify or intervene.

One of the most interesting and challenging issues in u-commerce is that this is a world-wide phenomenon. Because of the need to standardize the application, inter-phase, and inter-connectivity of all hardware and software relevant to the adoption and usage of u-commerce, the study of the adoption of u-commerce can have extended and universal implications for the practice of u-commerce in other places of the world.

This book is one of the first of its kind to set out to reveal the factors contributing to the supply, adoption and prospect of u-commerce. We have contributions from academics and professionals from all over the world. The book is designed to be an accessible document incorporating the elements of business decisions of firms and individuals involved in u-commerce. Our book will be of interest to marketers currently involved in e-commerce and m-commerce, and also to academics in the fields of marketing and IT. Both are keen to determine how they can perform further relevant research and position themselves well in the next generation of u-commerce. Last but not least, it is also a useful resource to guide students, scholars and researchers in relevant studies in this approaching ubiquitous business world.

The first chapter by Hung et al sets the path for a study of u-commerce by constructing a model of its related new technologies. This important introductory chapter argues that firms should explore
the consumers’ perception of u-commerce and further exploit the strategic advantages of u-commerce with reference to their adoption of new u-commerce technologies and proposes a conceptual reference framework for helping organizations deal with this dynamic situation. The practical aspect of the first chapter is further extended in second chapter by Frattini et al., which discusses the concept of new virtual home environment with reference to service-level roaming. They present a proposal for creating real localized, personalized virtual environments using web services and domain ontologies and in order to overcome interoperability issues that could arise from a lack of uniformity in service descriptions, they also identify a way for controlling and enforcing annotation policies based on the Service Registration Authority which allows services to be advertised according to guidelines and domain rules.

The introduction of mobile applications to support the sales force is discussed in great depth in Ben-Moussa’s chapter. Many managers have observed that the resistance by the sales force to the technology may be attributable to the failure to convince salespeople of the advantages and benefits of the new technology. The chapter thus proposes a value-based approach for planning the introduction of mobile applications to support the sales force and good planning can help firms avoid resistance of the sales force towards the implemented systems, rather than having to treat it with much more difficulties at the post-implementation stage. Dong’s chapter on purchasing behaviors in virtual economy focuses on the antecedent factors that will influence the intention to transact with virtual currency in Web2.0. The author observes that a new set of virtual environment-specific factors are playing as enhancing factors to attitudes and behavioral intention in Web2.0 transactions. A more intensive view of Web2.0 system users, as an important step towards a better understanding of the consumer behavior in Web2.0, can thus be developed.

In Yap’s chapter on U-commerce in the financial marketplace, the author presents how u-commerce is made available by online brokerage agents and the different interfaces they provide via various types of transactions, and how the ubiquitous demand and supply of financial knowledge and availability of trading tools and systems affect the behavior of traders and investors in the financial market. Last but not least, the author also explores how information and systems tools are regulated in relation to stock trading, stock manipulation, and global volatility of financial markets. In his chapter on related software for u-commerce, Rao presents the history of commerce in electronic environment, the concepts related to context computing, ubiquitous computing and pervasive computing, and grid computing. The recent trends and discussion about business models in relation to these concepts incorporated in various different contexts are also discussed.

The issue of multiple group-buying projects for multiple target items at the same time is analyzed in the chapter on the development of a software agent by Chen et al. It is suggested that it will be more flexible if every customer can initiate a group-buying project of his/her own for the item he/she personally needs in a convenient way and as such, a software agent is developed in this study to make every customer easily reach the Web page he/she browses for a target item for group-buying. An experimental system is constructed in this study to demonstrate the applicability of the software agent. Its advantages and/or disadvantages are also discussed. How research can help to create successful ubiquitous services is discussed in the chapter written by Palo et al. The authors examine and suggest proposals for further research in three important research fields, which are the basic nature of ubiquitous services, the needs of the customers, and the value creating networks developing and commercializing the ubiquitous services. These fields can be seen as the prerequisites for developing commercially successful ubiquitous services.
A framework for proximity aware mobile services is developed in the chapter by Quah and Jain. It describes the architecture at both client and server ends. Using the proposed framework, the authors develop a prototype to realize a real world application. The chapter by Cho and Hung examines the effects of the common antecedents of perceived ease of use (PEOU) and perceived usefulness (PU) on their mutual relationship. They conducted a survey of users’ acceptance of some common e-learning forums such as ICQ, WebCT, and MSN and observe that user-interface design (UID) explains 43% of the relationship between PEOU and PU, and that learners consider UID very important in deciding whether to accept an e-learning forum for their learning and communication.

Data quality on the Internet is getting more important as it is key resource for planning, producing, and communicating in the new millennium. The chapter by Cho provides an overall assessment and monitoring of data quality on the Internet, which would help individuals or organizations utilize high quality Internet resources for the decision making. From a legal perspective, Komaitis’s chapter on procedural fairness on the Internet discusses the disputes concerning the conflicting rights of trade mark owners and domain name holders are regulated under the umbrella of the Internet Corporation’s for Assigned Names and Numbers (ICANN) Uniform Domain Name Dispute Resolution Policy (UDRP). The last few chapters by Bang and Choi, Baarnes et al., Fronova, Zhang, Burmester, and Little et al., all provide some excellent illustrations of the exciting and growing world of ubiquitous commerce.

To conclude, in a rapidly changing world, the implications of the creation of personalized marketplace of ubiquitous commerce are important concerns for both the academic and business worlds. This book contains the latest thinking garnered from some of the most thoughtful scholars and researchers in many different countries. I have personally learned much from the authors featured in this book, much about the ubiquitous marketplace which is up to date and of direct relevance to my research in u-commerce. I hope this book can benefit all readers in the same way as it benefits me.

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